This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.   (Previously presented) A method for identifying a cancer patient susceptible to arginine deprivation therapy comprising the steps:

a) obtaining a cancerous tumor sample from the cancer patient; and

b) detecting the presence or absence of argininosuccinate synthetase protein in said cancerous tumor sample, wherein the absence of argininosuccinate synthetase protein in said cancerous tumor sample is indicative of a cancer patient who is a candidate for arginine deprivation therapy and the presence of argininosuccinate synthetase protein in said cancerous tumor sample is indicative of a cancer patient who is not a candidate for arginine deprivation therapy.

2.   (Previously presented) The method of claim 1 wherein prior to, simultaneous with, or after testing the cancerous tumor sample, the method further comprises the steps of:

c) obtaining a non-cancerous sample of the corresponding tissue from the cancer patient; and

d) detecting the presence or absence of argininosuccinate synthetase protein in said non-cancerous sample, wherein the absence of argininosuccinate synthetase protein in said non-cancerous sample and the absence of argininosuccinate synthetase protein in said cancerous tumor sample is indicative of a cancer patient who is not a good candidate for arginine deprivation therapy, wherein the presence of argininosuccinate synthetase protein in said non-cancerous sample and the absence of argininosuccinate synthetase protein in said cancerous tumor sample is indicative of a cancer patient who is a good candidate for arginine

deprivation therapy, and wherein the presence of argininosuccinate synthetase protein in said

cancerous tumor sample is indicative of a cancer patient who is not a candidate for arginine

deprivation therapy.

3-5.   (Canceled)

6.   (Previously presented) The method of claim 1 wherein the presence or absence of

argininosuccinate synthetase protein is detected using a technique selected from the group

consisting of Western blotting, ELISA, enzyme assays, slot blotting, electrophoresis, and

immunohistochemistry.

7.   (Previously presented) The method of claim 1 wherein the presence or absence of

argininosuccinate synthetase protein is detected using ELISA.

8-26. (Canceled)

27.   (Previously presented) The method of claim 1 wherein argininosuccinate synthetase

protein in said cancerous tumor sample is detected comprising the steps of:

        a) contacting the cancerous tumor sample of the cancer patient with an antibody

specific for an argininosuccinate synthetase protein, or portion thereof; and

b) detecting binding of the antibody to said argininosuccinate synthetase protein, or portion

thereof, in said cancerous tumor sample wherein the absence of binding of the antibody to

said argininosuccinate synthetase protein is indicative of a cancer patient who is a candidate

for arginine deprivation therapy and the presence of binding of the antibody to said

argininosuccinate synthetase protein in said cancerous tumor sample is indicative of a cancer

patient who is not a candidate for arginine deprivation therapy.

28-30. (Canceled)

31.   (Previously presented) The method of claim 27 wherein said antibody has a

detectable label.

32.   (Previously presented) The method of claim 31 wherein said detectable label is

radioactive, fluorescent, or chromomorphic.

33.   (Previously presented) The method of claim 31 wherein said detectable label is ^{131}I,

^{125}I, ^{14}C, ^{35}S, ^{32}P, or ^{33}P.

34.   (Previously presented) The method of claim 31 wherein said detectable label is

fluorescein, phycolipoprotein, or tetrarhodamine isothiocyanate.

35.   (Previously presented) The method of claim 31 wherein said detectable label is an

enzyme.

36.   (Previously presented) The method of claim 31 wherein said detectable label has a

visible color.